

WHAT IS CLAIMED IS:

1. A paperboard container, wherein the container has a bottom wall, opposite side walls, opposite end walls, and a self-locking arrangement on the end walls for holding the container in an erected condition, comprising:

an end flap panel on opposite ends of the side walls, and an end wall panel on opposite ends of the bottom wall, said end flap panels and end wall panels folded into overlapping relationship with one another and forming the end walls of the container;

said end flap panels having at least one notch formed in an upper edge;

a roll-over flap foldably joined by at least one web to an upper edge of each of the end wall panels and folded inwardly and downwardly over the upper edges of the end flap panels, said at least one web having a width less than the width of said end wall panel, and said at least one web engaged in said at least one notch; and

a projection on the upper edge of said end flap panels, extending laterally into said notch and forming a hook which engages an edge of said at least one web to retain the web in position in the notch and thereby retain the roll-over flap in position.

2. A container as claimed in claim 1, wherein:

said projection extends in a direction toward the side wall to which the end flap panel is connected.

3. A container as claimed in claim 2, wherein:

there are a plurality of notches in the upper edge of the end flap panels, and a projection is in only one of them.

4. A container as claimed in claim 3, wherein:

the notches include a notch at an outer end of the upper edge of the end flap panel, remote from the end of the panel that is connected to the side wall, and the projection is in that notch.

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5. A container as claimed in claim 3, wherein:

the notches include a notch at an inner end of the upper edge of the end flap panel, adjacent the end of the panel that is connected to the side wall, and the projection is in that notch.

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6. A container as claimed in claim 1, wherein:

there are a plurality of notches in the upper edge of the end flap panels, and a projection extends laterally into each of two of them.

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7. A container as claimed in claim 6, wherein:

at least one of said projections extends in a direction toward the side wall to which the end flap panel is connected.

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8. A container as claimed in claim 7, wherein:

both of said projections extend in a direction toward the side wall to which the end flap panel is connected.

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9. A container as claimed in claim 6, wherein:

one of said projections extends in a direction toward the side wall to which the end flap panel is connected, and the other projection extends in the opposite direction.

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10. A blank for making a container having a bottom wall, opposite side walls, and opposite end walls, comprising:

a central bottom wall panel for forming a bottom wall of a container, said bottom
10 wall panel having opposite side edges and opposite end edges;

a side wall panel foldably connected to each of the opposite side edges of the bottom wall panel for forming opposite side walls of a container, said side wall panels having opposite end edges;

end flap panels foldably connected to the opposite end edges of the side wall
15 panels, said end flap panels having a side edge which forms an upper edge of the end flap panel in an erected container, and at least one notch in said side edge;

an end wall panel foldably connected to each of opposite end edges of the bottom wall panel;

a roll-over flap foldably connected by at least one web to an edge of the end wall
20 panel opposite its connection with the bottom wall panel, said web adapted to lie in said at least one notch in an erected container; and

a projection on said side edge of said end flap panel, extending into said at least one notch to form a hook under which an edge of said web engages in a container erected from said blank.

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11. A blank as claimed in claim 10, wherein:

there are a plurality of notches in said side edge, and a projection is in each of two
30 of them.

12. A blank as claimed in claim 11, wherein:
the projections are oriented in the same direction.

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13. A blank as claimed in claim 11, wherein:
the projections are oriented in opposite directions.

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14. A cover for a container, wherein said cover comprises:
a top wall, opposite side walls, and opposite end walls;
said end walls each including an end wall panel foldably connected to an adjacent
end of the top wall, and end flap panels foldably connected to adjacent ends of the side
15 walls, said end flap panels having a lower edge with at least one notch therein, and said
end wall panel and said end flap panels being folded into overlapping relationship with one
another to form the end walls;

interlocking means on the end walls to hold the cover in erected condition, said
interlocking means including a roll-over flap foldably connected by at least one web to a
20 lower edge of the end wall panel and folded inwardly and upwardly along an inside surface
of the end wall panel, with said at least one web lying in said at least one notch; and

hook means projecting laterally into said at least one notch to engage an edge of
said at least one web to retain the web in position in the notch.

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15. A cover for a container, wherein said cover comprises:
a top wall, opposite side walls, and opposite end walls;
said end walls each including an end wall panel foldably connected along a score
30 line to an adjacent end of the top wall, and end flap panels foldably connected to adjacent
ends of the side walls, said end flap panels having a lower edge with at least one notch

therein, and said end wall panel and said end flap panels being folded into overlapping relationship with one another to form the end walls;

interlocking means on the end walls to hold the cover in erected condition, said interlocking means including a roll-over flap foldably connected by at least one web to a lower edge of the end wall panel and folded inwardly and upwardly along an inside surface of the end wall panel, with said at least one web lying in said at least one notch; and

relief means for accommodating an upper edge of the end flap panels, said relief means comprising a crushed area in an end edge portion of the top wall adjacent said score line, into which the upper edge of the end flap panels can rest to relieve pressure on the panels and avoid bowing of the cover walls.

16. A cover for a container having a bottom wall, opposite side walls, and opposite end walls, wherein openings are in the container end walls defining handholds, said cover comprising:

a top wall, opposite side walls, and opposite end walls;

said cover end walls each including an end wall panel foldably connected at a score line to an adjacent end of the cover top wall, and end flap panels foldably connected to adjacent ends of the cover side walls, said end flap panels having a lower edge with at least one notch therein, and said end wall panel and said end flap panels being folded into overlapping relationship with one another to form the cover end walls;

interlocking means on the cover end walls to hold the cover in erected condition, said interlocking means including a roll-over flap foldably connected by at least one web to a lower edge of the end wall panel and folded inwardly and upwardly along an inside surface of the end wall panel, with said at least one web lying in said at least one notch; and

a cover lock tab formed on the cover end walls for engagement in hand hold openings in associated end walls of a container on which said cover is adapted to be placed, to retain the cover on the container, said lock tab being defined by a cut made in the cover end wall panel and roll-over flap, forming a tab that projects downwardly from the lower edge of the cover end wall, and which has a convex, arcuately shaped lower end

edge with a pair of outwardly and downwardly directed wings at opposite sides of the convex lower end, said wings flexing to enable the tab to be pushed through a hand hold opening and then springing out to retain the lower end of the tab in the opening, and said convex, arcuately shaped lower end edge providing access for engagement of a finger or
5 fingers beneath the lower end edge to enable the tab to be withdrawn from a hand hold opening.

10 17. A blank for forming a cover having a top wall, opposite side walls, and opposite end walls, said blank comprising:
 a top wall panel that forms the cover top wall in an erected cover, said top wall panel
 having opposite side edges and opposite end edges;
15 a side wall panel foldably connected to each side edge of the top wall panel, said side wall panels having opposite end edges;
 an end wall panel foldably connected to each end edge of the top wall panel;
 an end flap panel foldably connected to each end edge of the side wall panels, said
20 end flap panels having an edge that is a bottom edge in an erected cover, said bottom edge having at least one notch therein, and said end wall panel and said end flap panels being foldable into overlying relationship with one another to form the end walls of a cover;
 a roll-over flap foldably connected by at least one web to an edge of each end wall panel that is a lower edge in an erected cover, and interlocking means on the end wall
25 panels and end flap panels to hold the cover in erected condition when the panels are folded into erected condition with said roll-over flap folded inwardly and upwardly along an inside surface of the end wall panel, and with said at least one web lying in said at least one notch; and
 hook means projecting laterally into said at least one notch to engage an edge of
30 said at least one web to retain the web in position in the notch in an erected cover.

18. A blank for forming a cover having a top wall, opposite side walls, and opposite end walls, said blank comprising:

a top wall panel that forms the cover top wall in an erected cover, said top wall panel having opposite side edges and opposite end edges;

5 a side wall panel foldably connected to each side edge of the top wall panel, said side wall panels having opposite end edges;

an end wall panel foldably connected to each end edge of the top wall panel;

an end flap panel foldably connected to each end edge of the side wall panels, said end flap panels having an edge that is a bottom edge in an erected cover, said bottom edge
10 having at least one notch therein, and said end wall panel and said end flap panels being foldable into overlying relationship with one another to form the end walls of the cover;

a roll-over flap foldably connected by at least one web to an edge of each end wall panel that is a lower edge in an erected cover, and interlocking means on the end wall panels and end flap panels to hold the cover in erected condition when the panels are
15 folded into erected condition with said roll-over flap folded inwardly and upwardly along an inside surface of the end wall panel, and with said at least one web lying in said at least one notch; and

a cover lock tab formed in each said end wall panel and associated roll-over flap, said cover lock tab having a free end that is a bottom end projecting below the end wall in
20 an erected cover, said bottom end having an arcuate concave edge and outwardly and downwardly angled wings or protrusions at opposite sides of the arcuate concave edge, and being defined by a shaped cut made in the end wall panel and roll-over flap.